MATTERS ARISING

A population-based study of syphilis and sexually transmitted diseases in north-western Tanazania

The rationale for improved sexually transmitted disease (STD) facilities in rural Africa as a means of slowing the spread of HIV presupposes that STDs are currently managed poorly and that this is a result of inadequate infrastructure. The finding of Mosha *et al*[1] that "*in Mwanza Region [Tanzania], active syphilis seems to be more prevalent than the treated infection*" at first glance provides strong support for the argument that money should be invested urgently in improved facilities for diagnosis and treatment. However, as is common practice (and I have been guilty of this myself[2]) active syphilis is defined as being RPR + TPHA + without quoting titres for the nontreponemal test. If such data were presented a different picture might emerge with a large number of individuals with low titre who can not be labelled as having an "active" infection with any certainty. A treated individual with a fall in titre from high levels to low levels is regarded as successfully treated unless, on follow up, the titres rise again. Thus a cross-sectional survey can never strictly speaking give the percentage of "active" syphilis and may only do so by choosing some arbitrary cut off, usually 1/8 titre.

Unless evidence obtained locally suggests otherwise, it should not be concluded that clinically diagnosed cases of early syphilis are inadequately treated in rural Africa. The treatment is cheap and readily available in most areas. Indeed all STD presentations tend to be treated with benzathine penicillin.[3] In my own field work in Uganda in the year the civil war ended, when services were maximally disrupted, only five of 36 TPHA positive outpatients were VDRL positive.[2] As in Tanzania[1] non-venereal syphilis and yaws are unlikely to have played a role. The argument that too many individuals are labelled as having active syphilis in serological surveys is strengthened by the fact that the highest rate of "active" syphilis in the Mwanza study was in those with an ulcer in the last year.[1] Successful treatment may fail to render a patient negative for nontreponemal tests in the first year of follow up particularly if patients present late.

With the advent of HIV a spuriously high rate of "active" syphilis may occur owing to a slower response of the titres to therapy in HIV positive individuals[4] or by the use of only one benzathine penicillin injection when perhaps three weekly injections should have been used.[5] In Mwanza, HIV is common and HIV infection is associated with positive serology for syphilis.[6] All things being equal, HIV patients with adequately treated syphilis are more likely to be RPR positive than their adequately treated HIV seronegative counterparts. In a recent Zimbabwe study there was a significantly higher rate of "active" syphilis in HIV positives.[7] In conclusion, now more than ever, serological surveys of syphilis in Africa should always give the breakdown of titres of whichever nontreponemal test is used.

CP HUDSON
AIDS Management Team, Queen Elizabeth Hospital, Barbados

1 Mosha F, Nicoll A, Barongo L, *et al.* A population-based study of syphilis and sexually transmitted disease syndromes in north-western Tanzania. 1. Prevalence and incidence. *Genitourin Med* 1993;**69**:415–20.
2 Hudson CP, Hennis AJM, Kataaha P, *et al.* Risk factors for the spread of AIDS in rural Africa: evidence from a comparative sero-epidemiological study of AIDS, Hepatitis B and syphilis in southwestern Uganda. *AIDS* 1988;**2**:255–60.
3 O'Farrell N, Hoosen AA, Kharsany ABM, Van den Ende J. Sexually transmitted pathogens in pregnant women in a rural South African community. *Genitourin Med* 1989;**65**: 276–80.
4 Zenker PN, Rolfs RT. Treatment of syphilis, 1989. *Rev Infect Dis* 1990;**12(Suppl 6)**: S590–605.
5 Esselink R, Enting R, Portegies P. Low frequency of neurosyphilis in HIV-infected individuals. *Lancet* 1993;**341**:571.
6 Barongo LR, Borgdorff MW, Mosha FF, *et al.* The epidemiology of HIV-1 infection in urban areas, roadside settlements and rural villages in Mwanza, Tanzania. *AIDS* 1992;**6**: 1521–8.
7 Le Bacq F, Mason PR, Gwanzura L, *et al.* HIV and other sexually transmitted diseases at a rural hospital in Zimbabwe. *Genitourin Med* 1993;**69**:352–6.

Opportunistic cervical cytology screening in a genitourinary department: is it worthwhile?

We read with interest the recent correspondence from Dhar and colleagues discussing the value of opportunistic cervical cytology screening based on their case note review of 200 new genitourinary medicine (GUM) clinic attenders.[1]

Unfortunately their policy for cervical cytology screening was not stated and it was unclear whether all new female attenders were screened or whether there was any element of selection. There was a further lack of clarity regarding the patients' previous cytology. Although it was stated that 152 (76%) patients had previously had cytology performed elsewhere, which was normal in 112, no details were given concerning the validation of these data.

The validation of previous cytology at alternative sites is a major problem for all concerned with the introduction of screening programmes and one wonders whether a system of patient held cytology records would be beneficial.

High grade abnormalities of moderate or severe dyskaryosis were found in 12 patients (6%), five of these occurred in women who had never had a cervical smear before. If selected screening had been utilised the five women not previously screened would have had cytology performed and thus the abnormality would have been detected. In the other women moderate dyskaryosis was identified in five and severe dyskaryosis in one; it is not clear how much delay there would have been with selective screening as cytological conversion times were not given in relation to the subsequent abnormalities.

No data were given about the prevalence of cytological abnormalities in women attending local family planning clinics, gynaecology outpatients or general practitioners and therefore no conclusions can be drawn about the cytological abnormalities in female GUM clinic attenders compared to other female groups in the area.

There has been much discussion about cervical cytology screening in GUM departments and the prevalence of cytological abnormalities appears to be higher amongst GUM attenders. For instance in a study of new GUM attenders in New Zealand 14·6% had abnormal smears; only in 6·6% of cases was this attributable to dysplasia or carcinoma in situ; nevertheless this figure was higher than rates seen in a local family planning cohort.[2] Elsewhere abnormality rates in GUM attenders have varied from 11·4% for dysplasia and carcinoma in situ in the United States[3] and 11·9% in Sri Lanka[4] whilst in a United Kingdom GUM clinic, in a study primarily looking at the follow-up of women with abnormal cytology, of the 4520 women screened 227 (5·0%) had mild dyskaryosis, 214 (4·7%) moderate dyskaryosis, 67 (1·5%) severe dyskaryosis.[5]

In view of the risk factors for cervical dysplasia commonly seen in female GUM clinic attenders, such as an early age of coitarche, multiple sexual partners and the presence of human papilloma virus it would seem logical to introduce targeted opportunistic screening. However, the value regarding the ultimate clinical outcome is unproven and it has been suggested that opportunistic screening should be carefully controlled with a reduction in the smears screened and an improvement in the CIN detection rate.[6]

We agree with the need for a large aged matched prospective study to compare cytological findings in GUM clinic attenders with other female cohorts. In addition we suggest that there is a greater need to compare cytology, colposcopy and biopsy findings with the final clinical outcome. Only by doing this can we truly assess whether a policy of opportunistic screening is of clinical benefit.

E M CARLIN
S E BARTON
St Stephen's Clinic, 369 Fulham Rd, London SW10 9TQ, UK

1 Dhar J, Bradley M, Alawettagama AB. Opportunistic cervical zcytology screening in a genitourinary medicine department: is it worthwhile? *Genitourin Med* 1993;**69**: 479–84.
2 Lyttle H, Platts WM, MacLean AB. Pilot study of cervical cytology screening in a sexually transmitted diseases clinic. *Genitourin Med* 1985;**61**:330–4.
3 Briggs RM, Holmes KK, Kiviat N, Barker E, Eschenbach DA, De Jong R. High prevalence of cervical dysplasia in STD clinic patients warrants routine cytological screening. *Am J Public Health* 1980;**70**:1212–4.
4 Abeyewickreme I. Cervical cytology screening in a sexually transmitted diseases clinic for the first time in Sri Lanka. *Genitourin Med* 1989;**65**:98–102.
5 Woolley PD, Talbot MD. Experience in Sheffield: follow-up of abnormal cervical cytology. *Int J STD & AIDS* 1990;**1**:95–7.
6 Coleman DV. Efficient use of cervical screening. *Lancet* 1987;**ii**:510–1.